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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,573	08/29/2001	Jean-Marie Stawikowski	213288US6X	5002

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EXAMINER

ZHONG, CHAD

ART UNIT PAPER NUMBER

2152

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/940,573	Applicant(s) STAWIKOWSKI, JEAN-MARIE	
	Examiner Chad Zhong	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) # _____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-24 are presented for examination.
2. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.
3. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.
4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.

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- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Specifically, Applicant is required to add titles to each of the subsections as stated in the above sample.

4. The specification is objected to because of the following: current US patent policy does not permit the use of hyperlinks in the specification. Such links are directed to an Internet site, the contents of which are subject to change without notice. Therefore, the potential for inclusion of new matter would be a constant problem. See page 4, for example. Correction is required throughout the entire application.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarzhoff et al. (hereinafter Schwarzhoff), US 6,591,260, in view of 'Official Notice'.

7. As per claim 1, Schwarzhoff teaches communication system on an IP network between an automation equipment with at least one processing unit capable of executing at least one program to provide automation functions and one or more remote items of equipment (Fig 1) executing one or several computer applications, characterized by the fact that the communication system is conform

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with the description language in order to provide monitoring, display, control, configuration or programming functions of the automation equipment to the remote equipment (Fig 1; Col. 3, lines 22-50), and the communication system uses at least one service description document conform with the description language that describes capabilities of one or several WEB services (Col. 2, lines 20-32) capable of interacting with a program on the automation equipment (Col. 4, lines 8-38, wherein the data is being encoded and decoded as it enters and leaves the network).

8. Schwarzhoff does not explicitly teach WSDL language, however, "Official Notice" is taken that the concept and advantages of providing for WSDL is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include WSDL with Schwarzhoff because it would provide for an extension to XML language that will improve the functionality of Schwarzhoff's system. Furthermore, Schwarzhoff's system is not language specific, the polymorphism aspect of Schwarzhoff's system is an example of supporting plurality of languages based on XML structure.

9. As per claim 2, Schwarzhoff teaches communication system according to claim 1, characterized by the fact that a service description document is accessible to remote equipment through a URL, URI or IP address through an IP network interface (Col. 6, lines 20-30, lines 35-40; Col. 3, lines 22-50).

10. As per claim 3, Schwarzhoff teaches communication system according to claim 2, characterized by the fact that a WEB service is capable of receiving and sending messages encoded according to at least one communication protocol conform with at least one WSDL binding described in a service description document, on the IP network (Col. 4, lines 8-22).

11. As per claim 4, Schwarzhoff teaches communication system according to claim 3, characterized by the fact that at least one WSDL binding described in a service description document is conform with the SOAP, HTTP or the MIME protocol (Col. 5, lines 19-45; Col. 6, lines 18-42).

12. As per claim 5, Schwarzhoff teaches communication system according to claim 4, characterized by the fact that at least one service description document describes the capacities of a WEB service to present a service conform with a protocol specific to the automation equipment (Col. 6, lines 20-30, lines 35-40; Col. 3, lines 22-50).

13. As per claim 6, claim 6 is rejected for the same reasons as rejection to claim 4 above.

14. As per claim 7, support of additional language structures based upon XML is addressed in claim 1 above.

15. As per claim 8, Schwarzhoff teaches communication system according to claim 1, characterised by the fact that the service description document for automation equipment is memorized in local storage means of a remote equipment (Col. 6, lines 35-43).

16. As per claim 9, Schwarzhoff teaches communication system according to claim 2, characterised by the fact that the service description document related to automation equipment is memorized in its storage means located in the automation equipment (Col. 6, lines 35-43).

17. As per claim 10, Schwarzhoff teaches communication system according to claim 2, characterised by the fact that the service description document related to automation equipment is memorised in storage means located in intermediate equipment connected to the automation equipment and to at least one item of remote equipment (Col. 6, lines 35-43).

18. As per claim 11, Schwarzhoff teaches communication system according to claim 2, characterised by the fact that the service description document for automation equipment is memorized in remote storage means located on a server (Col. 6, lines 35-43).

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19. As per claim 12, Schwarzhoff teaches communication system according to claim 2, characterised by the fact that it comprises a service description document generator capable of dynamically building a service description document for automation equipment following a request from a remote equipment, and accessible to remote equipment through an URL, URI or IP address through an IP network interface (Col. 6, lines 20-30, lines 35-43; Col. 3, lines 22-50).

20. As per claim 13, Schwarzhoff teaches communication system according to claim 3, characterised by the fact that a WEB service capable of interacting with a program in automation equipment is installed in the automation equipment (Col. 3, lines 23-50).

21. As per claim 14, Schwarzhoff teaches communication system according to claim 3, characterised by the fact that a WEB service capable of interacting with a program in automation equipment is installed in intermediate equipment connected to the automation equipment and to at least one item of remote equipment (Fig 1).

22. As per claim 15, claim 15 is rejected for the same reasons as rejection to claim 1 above.

23. As per claim 16, Schwarzhoff teaches communication system according to claim 2, characterised by the fact that a discovery document for a service description document related to automation equipment is accessible to remote equipment through an URL, URL or IP address (Col. 6, lines 20-30, wherein unique names are identifiers identifying corresponding various schemes).

24. As per claim 17, Schwarzhoff teaches communication system according to claim 16, characterised by the fact that the discovery document for a service description document for automation equipment is represented by one or several WEB pages conform with at least one WEB page description language, the said discovery document proposes one or several lists of URL, URL or IP addresses for one

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or several service description documents (Col. 5, lines 45 – Col. 6, lines 30, wherein schemes pieced together to form pages, all schemes offer different services.).

25. As per claim 18, Schwarzhoff does not explicitly teach communication system according to claim 16, characterised by the fact that the format of the discovery document of a service description document related to automation equipment is conform with the ADS (Advertisement and Discovery Services) specifications, or DISCO (Discovery) or UDDI (Universal Description, Discovery and Integration) specifications. “Official Notice” is taken that the concept and advantages of providing for the above is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include additional standard support with Schwarzhoff because it would provide for compatibility across multiple platforms.

26. As per claim 19, Schwarzhoff teaches communication system according to claim 16, characterised by the fact that the discovery document for a service description document for automation equipment is memorised in storage means located in the automation equipment (Col. 6, lines 35-43).

27. As per claim 20-21, claims 20-21 are rejected for the same reasons as rejection to claims 10-11 above respectively.

28. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarzhoff et al. (hereinafter Schwarzhoff), US 6,591,260, in view of Saulpaugh et al. (hereinafter Saulpaugh), US 6,792,466.

29. As per claim 22, Schwarzhoff does not explicitly teaches a second generation step in which a service description document 61 conform with the WSDL language is used to automatically or manually generate (52) all or some of a computer application (31) using code generators (43, 44,) or to generate a

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behaviour in a computer application (31) (by means of WSDL document interpreters (33, 34) such that the computer application (31) on the remote equipment (30) communicates with a WEB service (21, 21') by means of messages (53) conform with the communication protocol described in the service description document (61).

30. Saulpaugh teaches the above section for example Col. 63, lines 25-38.

31. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Schwarzhoff and Saulpaugh because they both dealing service offering network systems. Furthermore, the teaching of Saulpaugh to allow a second generation step in which a service description document 61 conform with the WSDL language is used to automatically or manually generate all or some of a computer application using code generators or to generate a behaviour in a computer application by means of WSDL document interpreters such that the computer application on the remote equipment communicates with a WEB service by means of messages conform with the communication protocol described in the service description document would improve security measures for Schwarzhoff system by generate the access interface document to access the remote device based on information provided by a remote device. The remainder of claim 22 is rejected for the same reasons as rejection to claim 1 above.

32. As per claim 23, claim 23 is rejected for the same reasons as rejection to combination of claims 16 and 17 above.

33. As per claim 24, claim 24 is rejected for the same reasons as rejection to claim 1 above.

34. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarzhoff et al. (hereinafter Schwarzhoff), US 6,591,260, in view of McNeely, US 2002/0069222.

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35. As per claim 22, Schwarzhoff does not explicitly teaches a second generation step in which a service description document 61 conform with the WSDL language is used to automatically or manually generate (52) all or some of a computer application (31) using code generators (43, 44,) or to generate a behaviour in a computer application (31) (by means of WSDL document interpreters (33, 34) such that the computer application (31) on the remote equipment (30) communicates with a WEB service (21, 21') by means of messages (53) conform with the communication protocol described in the service description document (61).

36. McNeely teaches the above section for example [0041].

37. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Schwarzhoff and McNeely because they both dealing service offering network systems. Furthermore, the teaching of McNeely to allow a second generation step in which a service description document conform with the WSDL language is used to automatically or manually generate all or some of a computer application using code generators or to generate a behaviour in a computer application by means of WSDL document interpreters such that the computer application on the remote equipment communicates with a WEB service by means of messages conform with the communication protocol described in the service description document. would improve location functionality for Schwarzhoff system by being able to generate additional dynamic content based on the received tags used for purpose of locating remote devices. The remainder of claim 22 is rejected for the same reasons as rejection to claim 1 above.

38. As per claim 23, claim 23 is rejected for the same reasons as rejection to combination of claims 16 and 17 above.

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39. As per claim 24, claim 24 is rejected for the same reasons as rejection to claim 1 above.

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Communication System For Automation Equipment Based On The WSDL Language".

i. US 2002/0032790 Linderman

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CZ
November 3, 2004



Dung C. Dinh
Primary Examiner